Legal Research

Search Strategies & Search Tools (Boolean)

**Search Strategy**

1. **Issues** – Understand the issues.
2. **Concepts** – Identify the concepts.
3. **Keywords** – Identify keywords that might be used to express your concepts (remember to consider terminology used by the courts and experts)
4. **Alternatives** – Think of alternative ways to express the concepts. Remember that a concept can be expressed in a number of different ways. Tools such as thesauri and dictionaries can help you think if alternative terms.
5. **Proximity** – Determine how close together the keywords should appear in the document. For instance whether they should appear in the same sentence or in the same paragraph. This will influence the relevancy of your search results.
6. **Evaluation** – Evaluate your search results. Refine your search further based on new information (e.g. date range, new terms, etc) Repeat the process until you get satisfactory results.

(Adapted From: Sarah E. Gotschall, Introduction to Search Logic and Strategies)

**Diagram 1. Search Strategy**

![Diagram 1. Search Strategy](image-url)
**Boolean Operators (Connectors)**

Now that you have the keywords (or terms) you need to join them together in a search statement using ‘Connectors’ (Boolean operators). These are ‘AND’, ‘OR’, ‘NOT’, phrase searching and proximity operators.

**AND** – drugs and offences
This will retrieve any materials that ***must*** contain both the terms ‘drugs’ and ‘offences’

**OR** – rationale or basis
This will retrieve any documents that contain ***either*** the term rationale or basis.

**NOT** – trust NOT charitable
This will contain any documents that contain the term trust ***but not*** if it also contains the term charitable.

**Phrase searching** – “strict liability”
This will retrieve documents that contain the ***exact phrase*** “strict liability”

Some databases like Lexis do not require you to use “” for phrase searching. However it will still conduct a phrase search if you do use the “”. **It is best to maintain the practice of using “” for phrase searching as other databases do require it. This means one less difference to remember.**

**Truncation** – acqui!
This will retrieve ***variations of the root term*** acquire such as acquires, acquired, acquiring, and acquisition

**Wildcard** (also known as a universal character) – wom*n
This would retrieve woman and women

**Proximity Operators** -
design w/s defect – will retrieve documents with terms within the same sentence
hearsay w/p utterance – will retrieve documents with the terms within the same paragraph.
pay W/3 television - will retrieve documents with the term within 3 words of television.

This is not an exhaustive list.

Boolean connectors are used across commercial databases and even Google. Learning how to use them effectively will make you a more efficient and precise searcher. However you should take note that different databases and search engines use different symbols to represent these functions. For example, in Lexis the **OR** connector is represented by typing **OR** but in Westlaw OR is represented by just **leaving a space** in between the terms. **You should always refer to the database ‘Help’ or ‘Search Tips’ link for details.**
For a quick reference guide to the different connectors used in LawNet, Lexis and Westlaw, download the Legal Database Help Sheet from the library website.

**Caution:**
Many databases offer Natural Language or Easy Search. These are tempting options for undergraduates looking for a Google like search solution. As legal researchers, you should be mastering searching by Terms and Connectors. It enables you to conduct a more precise search. Used properly, you will retrieve more comprehensive and relevant results.

### Constructing a Search Statement

When you combine keywords using connectors in a search statement, the order in which you combine the terms greatly influences the outcome of the results.

First thing to note is that search engines will conduct a search from left to right.

For instance,

```
defense AND murder OR homicide
```

This will retrieve documents that must have terms defence AND murder.

OR any documents that just contain the term homicide.

To change the order the documents are processed, you need to use parenthesis ( ). Terms and connectors within the ( ) are processed first.

For instance:

```
defense AND (murder or homicide)
```

This will retrieve documents that must contain the terms defense and murder

OR

Any documents that contain the terms defense and homicide.

Try this search in any of the legal databases and you will notice the difference in the number of search results.
I recommend attempting the online tutorial, *Introduction to Search Logic and Strategies by Sarah E. Gotschall*, on the database CALI. The online lesson provides easy to understand explanations on search strategy, Boolean operators and plenty of practice examples on Westlaw and Lexis. If you have not received instructions on how to access this database, please send an e-mail to lib_research@smu.edu.sg for the authorisation code.

**Additional Reading:**

**Electronic Research and Using Boolean:**


**Developing Research Plans:**


**Useful research tools:**


If you need additional help formulating your search strategy or using a particular database, contact the library at libresearch@smu.edu.sg